**ECG Robotics, Walmart Grant Application 2012**

**\*Organization Mission**  
(Paragraph; 2000 character maximum)

As part of the FIRST Robotics Competition, the mission of ECG Robotics, Inc. is to inspire young people to be science and technology leaders by engaging them in mentor-based programs that build science, engineering and technology skills, support innovation, and foster well-rounded life capabilities including self-confidence, communication, and leadership.   
  
ECG Robotics, FRC Team 1533 -- Triple Strange participates in the FIRST (For Inspiration and Recognition of Science and Technology) ([www.usfirst.org](http://www.usfirst.org)) Robotics Competition FRC program, a fun, yet competitive program that embraces the ideas of gracious professionalism and coopertition. In addition to building robots, we share the excitement of science, technology, engineering and mathematics throughout Guilford County with year-round outreach events including tutoring and mentoring of elementary and middle school students.

Our objective is to provide a local community program for high-school students that:  
  
1. Develops real life leadership skills in problem solving, cooperation, creative design, and teamwork with a concentrated focus in math, science, technology, and engineering.  
  
2. Positively influences our community by exciting younger students about STEM fields.  
  
3. Builds community partnerships between students, parents, mentors, and community sponsors that include large and small businesses as well as educational institutions.

**\*Current Activity**  
(Paragraph; 2000 character maximum)

Description of current programs, activities and accomplishments.

Every January, FIRST announces the season's new game challenge to the world and students have 6 weeks to build a robot for spring competition. As a team, students decide game strategy, then design, create, assemble, program, and test the robot. The robot must be built on time, meet strict weight, size, and safety standards, and be within budget. These are real life issues teaching real life skills.

Team 1533 is a student run organization. Students learn skills every organization needs: leadership, teamwork, communication, and group decision-making. Others skills are more technical: using software, engineering and programming. Some are business: using graphics software, planning and budgeting. Mentors are engineers, business people, professors and parents who work closely with and help students move forward with their tasks. Throughout the standard of conduct is gracious professionalism.

While the robot is the main focus, students share the excitement of science, technology, engineering, and math (STEM) through community outreach events. Each year students show their robot to schools, college fairs, businesses, and educational conferences. Events in the last two years include: NC Museum of Natural Sciences New Wing Grand Opening, several youth conferences, the Greensboro Grasshoppers, General Green Elementary School's Technology Fair, Greensboro Roller Derby, RFMD College Fair, NC Technology Association Leadership Conference, Guilford State of the Schools Address, NCA&T Aggieland FTC Robotics Championship, and the Guilford Education Alliance Summit. Our students assist younger students with homework and lead LEGO enrichment clubs at elementary schools, volunteer at FIRST Robotics tournaments, mentor middle school LEGO Robotics teams, and volunteer at the Natural Science Center's LEGO activities. Through volunteering over 1200 hours each year, our high school student team members bring the excitement of STEM activities to thousands of young people.

**\*Facebook**  
(Text; 500 character maximum)

[http://www.facebook.com/Team1533?fref=ts](http://www.facebook.com/Team1533?fref=ts" \t "_blank)

**\*Twitter**  
(Text; 500 character maximum)

[https://twitter.com/team1533](https://twitter.com/team1533" \t "_blank)

**\*Previous Funding - This Location**  
(Yes/No)

NO

**\*Focus Area**  
(Single-Select List)

 Education

**\*Primary Subcategory**  
(Single-Select List)

 ----College Preparation

 ----Mentoring/Tutoring

**\*Area Served**  
(User-Defined List)

Guilford County

**\*People Served**  
(Number; 15 digit maximum)

45

**\*Gender - Enter whole numbers only, total must equal people served.**  
 Male - 34

 Female - 11

**\*Age Group - Enter whole numbers only, total must equal people served.**

 Unknown/Unreported ages

 Children (0-12)

 Youth (13-18) - 45

 Adults (19-24)

 Adults (25-55)

 Mature (56+)

**\*Ethnic background - Enter whole numbers only, total must equal people served.**

 Unknown/Unreported - 1

 African American or Black - 7

 Asian and Pacific American Islander - 14

 Hispanic or Latino - 2

 Multi-ethnic

 American Indian or Alaskan Native

 White - 21

**\*Grant Type**  
(Single-Select List)

 Local Community Contribution

**\*Requested Grant Amount**  
(Currency; 20 character maximum)

$2000

**\*Project Title**  
(Text; 255 character maximum) - Enter the project title of your prgram.

WMT 1842 Application

**\*Fund Use**  
(Paragraph; 150 character maximum) - Provide a brief narrative of how funds will be used

Request $2000 for Robot parts like motors, sensors, gears, chains, belts. Exact materials are known in January when students design the robot.

**\*Program Description**  
(Paragraph; 2000 character maximum)

FIRST was founded in 1989 to inspire young people's interest and participation in science and technology. Based in Manchester, NH, the 501 (c) (3) not-for-profit public charity designs accessible, innovative programs that motivate young people to pursue education and career opportunities in science, technology, engineering, and math (STEM), while building self-confidence, knowledge, and life skills.

ECG Robotics Team 1533 -- Triple Strange will participate in FIRST Robotics for its ninth year in 2012-13. Our team has 45 students from 10 high schools from Guilford County. We welcome any and all students who want to participate.  
  
We are an independent non-profit that does not have access to a school workspace or a company sponsored facility. In 2010 we incorporated, became a 501(c)(3) and made the financial commitment ($600/month plus utilities) to lease a 1700 square foot open room in a business park centrally located in Guilford County. This has greatly enabled us to make this experience year-long and more accessible for students. For the past two summers, students met continuously over the summer and spent their time building and maintaining their demonstration robots, and training each other.   
  
Team Schedule:  
Fall: Engineering, safety, and programming training, marketing preparations, FIRST Lego League Mentoring, elementary school volunteering starts and continues throughout the school year.   
Jan - Feb: Build season! Students meet 6 days a week, afterschool from 4 - 7pm, and on Saturdays from 9 - 5 pm.  
Mar - Apr: Attend 2 regional competitions -- Tournaments are 3 days in length, Thursday thru Saturday, and attended by teams from across the US, and other countries.   
Summer: New student leadership team prepares for upcoming season. School and sponsor presentations, robot maintenance, build demonstration robot, and summer community service. Team meets once a week during the summer.

**\*Program Relevancy**  
(Paragraph; 2000 character maximum)

Briefly describe how your proposed program will be used to meet the needs of the community within the service area of the facility to which you are applying for funds

Science and technology are important factors in bringing about significant changes in the global environment. Developments in these fields dominate organizations’ and countries’ abilities to solve global challenges and be leaders in the world economy. Many documented studies show that American students are academically behind our international counterparts. Locally, in Guilford County, according to information provided in the Guilford Education Alliance’s (GEA) Education Matters in Guilford County: Measuring Community and School Success – Fall 2010, about 30% of Grade 10 students did not make Academic Yearly Progress in both math and reading (page 19). Additionally, Guilford County SAT Test Takers (All Students) performed below the national average for the past 4 years (page 21). FIRST Robotics provides an interactive and exciting program to give students a push towards success in math and science.

The expected impact we seek is an increased interest in science and math. We see enthusiasm when students share what they learned with other students, spreading their passion for science. We also see the impact in the choices alumni make for college. From 2010 to 2012, 29 students have graduated from our program and all went to a 4-year college and 23 students planned to study science or engineering.

Success for us is to continue building a future where students are enthusiastic about science and math. ECG Robotics provides a successful learning experience for our students because of tremendous support from many community partners. Each year we need funds, materials, a place to build and store our robots, and engineering and non-engineering adult mentors, and it is the community partners that help provide this. We are 1 of 3 high school Robotics teams in Guilford County that participate in the FIRST FRC program. We are an established program because of the support of parents, volunteers, community partners, and the enthusiasm of the students.